

# EC centrifugal fan

forward curved, single inlet

R3G140-AY11-15 ebmpapst Datasheet

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## Nominal data

<b>Type</b>	<b>R3G140-AY11-15</b>	
<b>Motor</b>	<b>M3G055-CF</b>	
Phase		1~
Nominal voltage	VAC	230
Nominal voltage range	VAC	195 .. 253
Frequency	Hz	50/60
Type of data definition		ml
Speed	min <sup>-1</sup>	2300
Power input	W	87
Current draw	A	0.67
Min. ambient temperature	°C	-25
Max. ambient temperature	°C	40

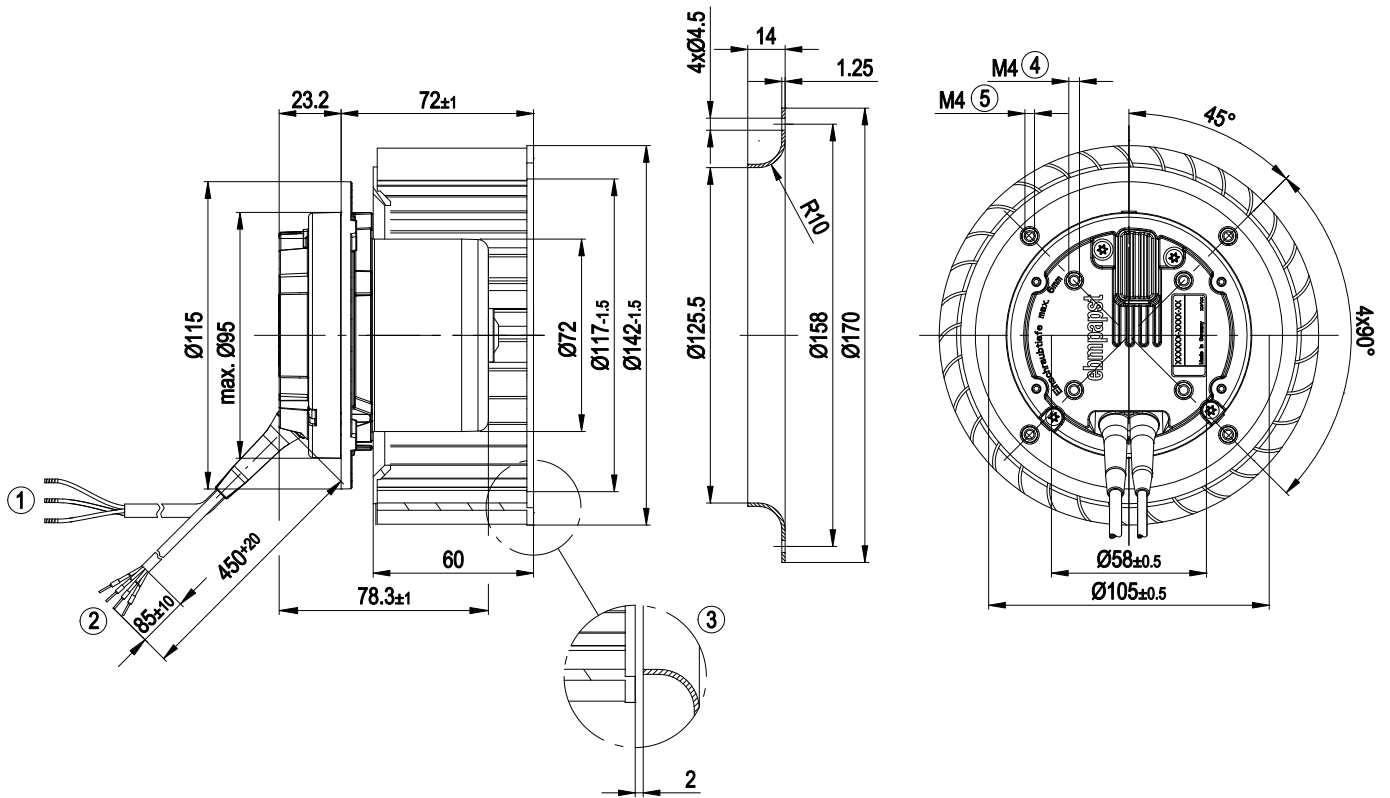
ml = max. load · me = max. efficiency · fa = running at free air · cs = customer specs · cu = customer unit  
Subject to alterations



### Technical features

Mass	0.98 kg
Size	140 mm
Surface of rotor	Coated in black
Material of impeller	PP-TV40 plastic
Direction of rotation	Clockwise, seen on rotor
Type of protection	IP 22
Insulation class	"B"
Humidity class	F0
Max. permissible ambient motor temp. (transp./ storage)	+80 °C
Min. permissible ambient motor temp. (transp./storage)	-40 °C
Mounting position	Any
Condensate discharge holes	None
Operation mode	S1
Motor bearing	Ball bearing
Technical features	<ul style="list-style-type: none"> <li>- Control input 0-10 VDC / PWM</li> <li>- Output 10 VDC, max. 1.1 mA</li> <li>- Tach output</li> <li>- Over-temperature protected motor</li> <li>- Motor current limit</li> <li>- Soft start</li> </ul>
EMC interference immunity	Acc. to EN 61000-6-2
EMC harmonics	Acc. to EN 61000-3-2/3
EMC interference emission	Acc. to EN 61000-6-3
Touch current acc. IEC 60990 (measuring network Fig. 4, TN system)	<= 3.5 mA
Motor protection	Thermal overload protector (TOP) wired internally
Cable exit	Variable
Protection class	I (if protective earth is connected by customer)

Product drawing



1	Connection line AWG20, 3 x brass lead tips crimped
2	Connection line AWG22, 4 x crimped core-end sleeves
3	Accessory part: Inlet nozzle 09576-2-4013, not included in the standard scope of delivery
4	Depth of screw max. 6 mm
5	Depth of screw max. 6 mm

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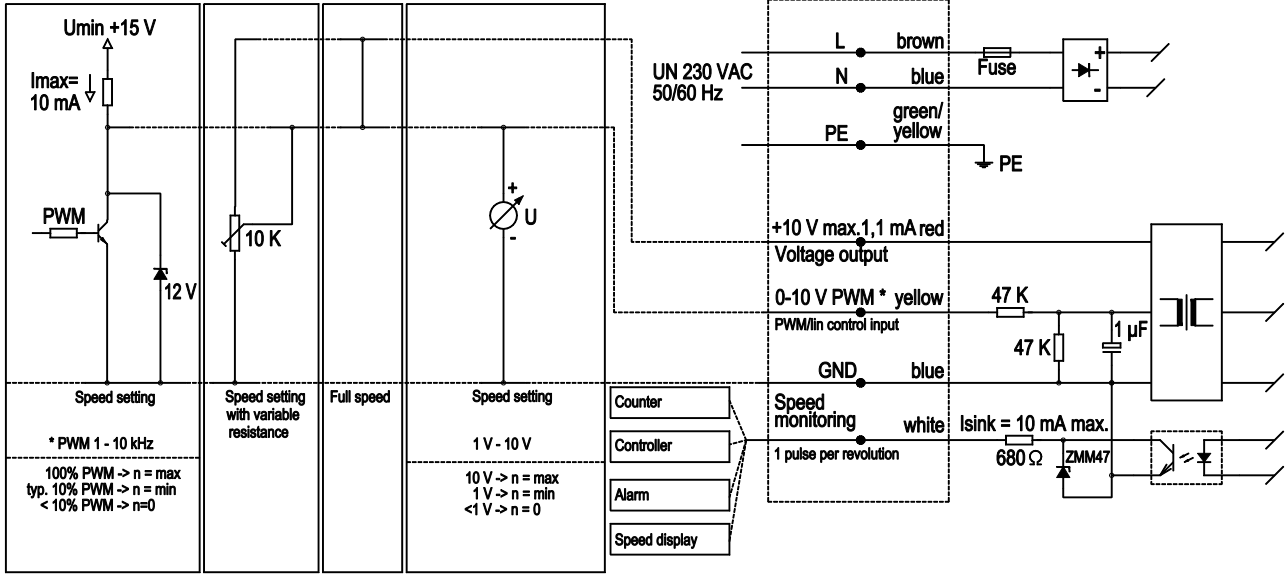
## Connection screen

Customer circuit

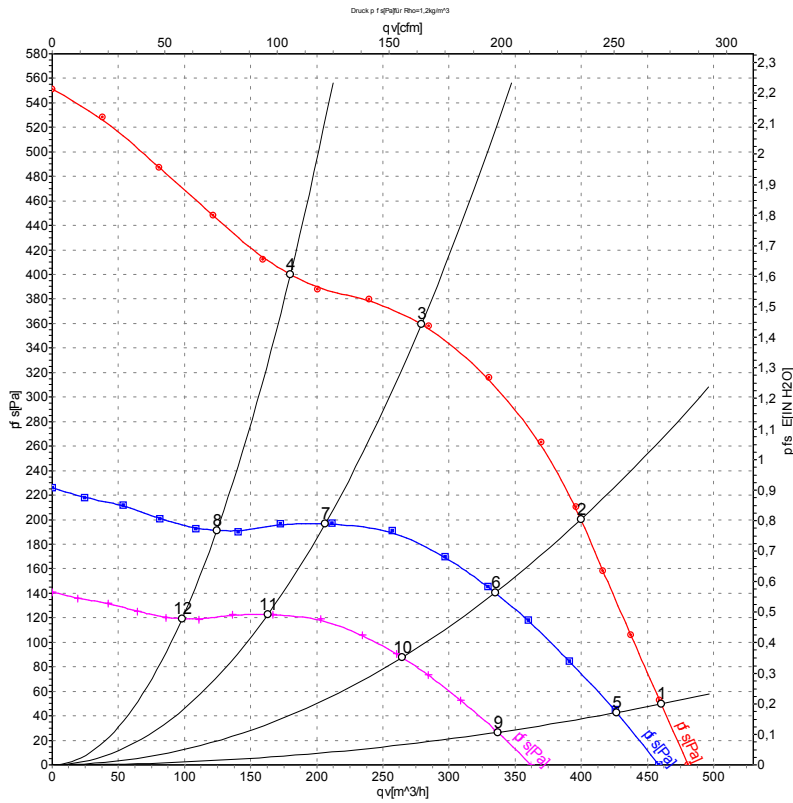
Connection

Fan / motor

Notes on various control possibilities and their applications



## Charts: Air flow 50 Hz



Measurement: LU-113971

Air performance measured as per ISO 5801 Installation category A. For detailed information on the measuring set-up, please contact ebm-papst. Suction-side noise levels: LwA measured as per ISO 13347 / LpA measured with 1m distance to fan axis. The values given are valid under the measuring conditions mentioned above and may vary according to the actual installation situation. With any deviation from the standard set-up, the specific values have to be checked and reviewed with the unit installed.

## Measured values

	U	f	n	P <sub>ed</sub>	I	qv	P <sub>fs</sub>
	V	Hz	min <sup>-1</sup>	W	A	m <sup>3</sup> /h	Pa
1	230	50	2100	87	0.67	460	50
2	230	50	2270	87	0.64	400	200
3	230	50	2570	70	0.52	280	360
4	230	50	2750	57	0.43	180	400
5	230	50	1900	68	0.52	425	44
6	230	50	1900	50	0.38	335	141
7	230	50	1900	28	0.21	205	197
8	230	50	1900	19	0.14	125	191
9	230	50	1500	34	0.25	335	27
10	230	50	1500	25	0.19	265	88
11	230	50	1500	14	0.10	165	123
12	230	50	1500	9.3	0.07	100	119

U = Supply voltage · f = Frequency · n = Speed · P<sub>ed</sub> = Power input · I = Current draw · qv = Air flow · P<sub>fs</sub> = Pressure increase

